Last two abdominal segments with a broad median dusk mark on the dorsum. Whole body clothed with short, fine, black hairs.

Oviposition has not been observed, but probably takes place during June and July, but in the case of L. mendax it may be deferred till September, as Reuter records adult specimens captured during that month.

I have reared the nymphs of both species from apple branches sent in from Brockport, Syracuse, Albany, Waterloo, East Palmyra, Lafayette, and Batavia, N. Y. In some apple orchards they are serious pests, deforming with their feeding punctures a large proportion of the fruit of certain varieties.

## A NEIV SPECIES OF PHALANGIDA FROM MISSOURI.

BY CYRUS R. CROSBY, ITHACA, N. Y.

Nemastoma dasycnemum, n. sp.-Length, .95 mm . ; width of abdomen, .59 mm . General colour in alcohol very dark brown, in life nearly black; in one specimen the body is distended, making it appear white, with black markings, but in the other, which was studied alive, this is not the case.

Cephalothorax squarely truncate in front, with the lateral angles oblique when viewed from above. Eyes small, situated on a low tubercle close to the anterior margin, separated by a little less than their diameter, each one surrounded by a series of sharp


Fig. 1-Ventral view of mouth- black spines. Frontal pieces of the cephalothorax two in number, transverse, contiguous and gradually enlarged laterally. Two-thirds the distance from the eyes to the posterior margin of the cephalothorax there is a distinct transverse groove, which becomes indistinct at the sides. In the distended specimen the thickened parts of the tegument are separated from each other and contrast sharply with the snow-white connecting membrane. The first five dorsal abdominal segments are united into a single piece, free from the cephalothorax, and with the anterior and posterior margins convex. The sixth, seventh and eighth dorsal segments are represented by narrow, transverse sclerites. On the ventral side five segments are distinguishable. The first is large, narrowed in front and separated from the terminal portion by a January, 1911
distinct suture ; terminal portion rectangular, with the anterior margin slightly convex. Second, third and fourth segments linear, fifth much wider. The anal piece consists of three parts: the superior part (pygidium) semicircular, the two lateral anal valves small and triangular; the anal sternite represented by a small dark spot scarcely hardened. Between the ends of the fifth ventral and eighth dorsal segments there is on each side a small, irregularly shaped sclerite. The hardened parts are brown, with the surface slightly roughened by minute tubercles; certain areas are, however, armed with larger tubercles less thickly placed, as follows: The entire cephalothorax, except the area between the eye tubercle and the transverse groove ; a large quadrate area on the anterior part of the large dorsal plate, indistinctly divided into three parts; two transverse areas behind this ; narrow transverse areas on the sixth, seventh and eighth dorsal segments ; the entire surface of the pygidium, and the posterior part of the first ventral segment.

Coxæ of nearly equal length, trochanters globular, both are dark brown and armed with short black spines. Base of femur white and unarmed, rest of femur, pateila and tibia brown, and armed with short acute perpendicular spines and long slender hairs, which in their basal half are at right angles to the segment, and in their distal half bent forward and somewhat matted together. The other segments pale, thinly clothed with slender oblique spines and very fine appressed hairs. Each tibia armed at the tip above with a short, stout, slightly curved, tooth-like spine. Tarsal claws unarmed.

Palpus long and slender, sparsely clothed with short, erect setæ; trochanter armed below with three longer recurved setæ; tarsus slightly clavate and more thickly clothed with setæ than the other segments. Cheliceræ light gray, the claw armed with a series of fourteen teeth, of which the terminal two are the largest ; the opposing figure armed with about ten similar teeth. Preëpistome broad, convex and strongly chitinized, epistome produced into a sharp vertical ridge. Endites of the palpus white, triangular, with the outer margins slightly convex. Endites of the first pair of legs with a chitinized lateral border, curved and enlarged distally, inner portion white, with the anterior margin convex ; situated between them is a small semicircular sclerite, which'seems to represent the sternum. Coxæ of the second pair distant from sternum and not provided with endites. (Fig. i.)

In the following table the length of the segments of the legs and the palpus is given in millimeters. Owing to the difficulty of determining the division between the tarsi and the metatarsi because of the presence of several false articulations, I have for convenience in the table considered the first segment after the tibia as representing the metatarsus, the remaining segments the tarsus.

| Legs. | I. | II. | III. | IV. | Palpus. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Tar | $\int .13$ | . 16 | . 09 | . 07 | . 27 |
|  | . 1 | . 13 | . 06 | . 06 |  |
|  | . 24 | . 15 | . 06 | .09 |  |
|  | ( | . 25 | . 24 | . 27 |  |
| Total. | . 47 | . 69 | . 45 | . 49 |  |
| Met . . |  | . 57 | . 4 | . 57 |  |
| Tib.... | . 4 | . 66 | . 43 | . 64 | . 43 |
| Pat.... | . 13 | . 13 | . 13 | . 15 | . 4 |
| Fem... | . 55 | . 72 | .48 | . 64 | . $5^{2}$ |
| Tro. |  |  |  |  | . 24 |

Three specimens, Columbia, Mo., November 8 and 20, 1904, July 12, 1905 , collected under leaves on a heavily wooded north slope on the bank of Hinkson Creek.

I place this species in Nemastoma for the present, although it differs from it in the separation of the dorsal plate of the cephalothorax from the tergites of the abdomen, the presence of a transverse groove on the cephalothorax back of the eye tubercle, the exposure of the stink glands, the suppression of the anal sternite, and the dentition of the digits of the cheliceræ.

## RANDOM NOTES ON ENTOMOLOGICAL FIELD WORK.*

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Opportunities often occur in entomological field work for the observation of interesting features of insect life apart from the main subject of investigation. Such features in many cases are presented in connection with the regular observations, but independently as time permits, casual

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[^0]:    *Published by permission of the Chief of the Bureau of Entomology. January, 1911

